

Hydrologic Model Manager

Short Name	RIOFISH
Long Name	
Description	
Model Type	Deterministic, numeric simulation system
Model Objectives	To simulate habitats for New Mexico sportfisheries and their supporting biotic communities
Agency Office	Department of Fishery and Wildlife Sciences, New Mexico State University, Las Cruces, New Mexico, U. S. A.
Tech Contact	Dr. Richard A. Cole
Model Structure	The model is comprised of hydrologic, ecological and socio-economic components. Information outputs from the hydrologic component become inputs for the function of both ecological and the socio-economic components of RIOFISH.
Interception	
Groundwater	
Snowmelt	
Precipitation	
Evapo-transpiration	
Infiltration	
Model Parameters	Many parameters, some obtained from physical measurements and some obtained by calibration.
Spatial Scale	Catchment or sub-catchment scale
Temporal Scale	Bimonthly or 13 to 16 days
Input Requirements	Hydrologic and socio-economic and ecological
Computer Requirements	PC with windows
Model Output	Diagnostic information for management decisions
Parameter Estimation Model Calibration	Parameters are obtained from physical measurements and by calibration against observations.
Model Testing Verification	tested on a number sites in New Mexico
Model Sensitivity	Nor reported
Model Reliability	Nor reported
Model Application	Applied to a number sites.
Documentation	Nor available in public domain but it can be obtained from Dr. R. A. Cole
Other Comments	<p>The model is a potentially useful tool for management decisions.</p> <p>References;</p> <p>Cole, R., Ward, T., Ward, F. and Deitner, 1986. A simulation model for managing fisheries in reservoirs of the Rio Grande of New Mexico. In Reservoir Fisheries Management Strategies for the 80's, edited by G. E. Hall, pp. 18-28, Allen Press, Lawrence, Kansas.</p>

Cole, R. A., Ward, F. A., Ward, T. J. and Wilson, R. M., 1990. Development of an interdisciplinary model for water and fishery management. Water resources Bulletin, Vol. 26, No. 4, pp. 597-609.

Cole, R. A., Ward, T. J., Ward, F. A., Deitner, R. A., Rodden, R. W., Bolton, S. M. and Green-Hammond, K. A., 1995. RIOFISH: A statewide comprehensive management system model for New Mexico sportsfisheries. WRRRI Technical Completion Report 291, New Mexico Water Resources Research Institute, New Mexico State University, Las Cruces, 230 pp.

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Developer	
Technical Contact	
Contact Organization	